

Version: 1.1 Revision Date: 09/26/2016

SAFETY DATA SHEET

1. Identification

Material name: TRISOTECH G ROOF INSULATION 3.3" Material: 305330 550

Recommended use and restriction on use

Recommended use: Article Restrictions on use: Not known.

Manufacturer/Importer/Supplier/Distributor Information

Tremco U.S. Roofing 3735 Green Road Beachwood OH 44122 US

Contact person: Telephone: Emergency telephone number: EH&S Department 216-292-5000 1-800-424-9300 (US); 1-613-996-6666 (Canada)

2. Hazard(s) identification

Hazard Classification

Health Hazards

| Carcinogenicity | Category 1B |
|---|-------------|
| Unknown toxicity - Health | |
| Acute toxicity, oral | 90 % |
| Acute toxicity, dermal | 100 % |
| Acute toxicity, inhalation, vapor | 100 % |
| Acute toxicity, inhalation, dust or mist | 100 % |
| Unknown toxicity - Environment | |
| Acute hazards to the aquatic environment | 100 % |
| Chronic hazards to the aquatic | 100 % |
| | 100 /0 |

Label Elements

Hazard Symbol:

environment



Signal Word:

Precautionary

Danger

Hazard Statement:

May cause cancer.



| Statements: Prevention: | Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Use personal protective equipment as required. |
|--|--|
| Response: | If exposed or concerned: Get medical advice/attention. |
| Storage: | Store locked up. |
| Disposal: | Dispose of contents/container to an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal. |
| Other hazards which do not result in GHS classification: | None. |

3. Composition/information on ingredients

Mixtures

| Chemical Identity | CAS number | Content in percent (%)* |
|---|------------|-------------------------|
| Fibrous Glass | 65997-17-3 | 5 - <10% |
| Pentane | 109-66-0 | 1 - <5% |
| Carbon Black | 1333-86-4 | 1 - <5% |
| * All concentrations are percent by weight unless ingredient is a gas. Gas concentrations are in percent by | | |

* All concentrations are percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

| 4. First-aid measures | |
|-----------------------------|---|
| Ingestion: | Call a POISON CENTER/doctor//if you feel unwell. Rinse mouth. |
| Inhalation: | Move to fresh air. |
| Skin Contact: | Remove contaminated clothing and wash the skin thoroughly with soap and water after work. |
| Eye contact: | Rinse immediately with plenty of water. |
| Most important symptoms/ | effects, acute and delayed |
| Symptoms: | May cause skin and eye irritation. |
| Indication of immediate med | lical attention and special treatment needed |
| Treatment: | Symptoms may be delayed. |
| 5. Fire-fighting measures | |
| General Fire Hazards: | No unusual fire or explosion hazards noted. |



Suitable (and unsuitable) extinguishing media

| Suitable extinguishing media: | Use fire-extinguishing media appropriate for surrounding materials. |
|--|---|
| Unsuitable extinguishing media: | Do not use water jet as an extinguisher, as this will spread the fire. |
| Specific hazards arising from the chemical: | During fire, gases hazardous to health may be formed. |
| Special protective equipment an | d precautions for firefighters |
| Special fire fighting procedures: | No data available. |
| Special protective equipment for fire-fighters: | Self-contained breathing apparatus and full protective clothing must be worn in case of fire. |
| 6. Accidental release measures | s |
| Personal precautions, protective equipment and emergency procedures: | No data available. |
| Methods and material for containment and cleaning up: | Collect spillage in containers, seal securely and deliver for disposal according to local regulations. |
| Notification Procedures: | In the event of a spill or accidental release, notify relevant authorities in accordance with all applicable regulations. |
| Environmental Precautions: | Do not contaminate water sources or sewer. Prevent further leakage or spillage if safe to do so. |
| 7. Handling and storage | |
| Precautions for safe handling: | Ventilate well, avoid breathing vapors. Use approved respirator if air contamination is above accepted level. Use mechanical ventilation in case of handling which causes formation of dust. Wash hands thoroughly after handling. Do not handle until all safety precautions have been read and understood. Obtain special instructions before use. Use personal protective equipment as required. |
| Conditions for safe storage, including any incompatibilities: | Store locked up. |
| 8. Exposure controls/personal | protection |

Control Parameters Occupational Exposure Limits



| Chemical Identity | type | Exposure Limit Values | Source |
|------------------------|------|-----------------------|-------------------------------------|
| Fibrous Glass - | TWA | 5 mg/m | 3 US. ACGIH Threshold Limit Values |
| Inhalable fraction. | | | (03 2014) |
| Fibrous Glass - Fiber. | TWA | | 1 US. ACGIH Threshold Limit Values |
| | | fibers/cm | 3 (03 2014) |
| | TWA | | 1 US. ACGIH Threshold Limit Values |
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| | | fibers/cm | 3 (03 2014) |
| | TWA | | 1 US. ACGIH Threshold Limit Values |
| | | fibers/cm | 3 (03 2014) |
| | TWA | 0. | 2 US. ACGIH Threshold Limit Values |
| | | fibers/cm | 3 (03 2014) |
| Pentane | TWA | 1,000 ppm | US. ACGIH Threshold Limit Values |
| | | | (02 2014) |
| | PEL | 1,000 ppm 2,95 | 0 US. OSHA Table Z-1 Limits for Air |
| | | mg/m | |
| | | | (02 2006) |
| Carbon Black - | TWA | 3 mg/m | 3 US. ACGIH Threshold Limit Values |
| Inhalable fraction. | | | (2011) |
| Carbon Black | PEL | 3.5 mg/m | |
| | | | Contaminants (29 CFR 1910.1000) |
| | | | (02 2006) |

| Chemical name | type | Exposure Limit Values | Source |
|------------------------|------|-----------------------|---|
| Fibrous Glass - Fiber. | TWA | 0.2 fibers/cm3 | Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007) |
| | TWA | 1 fibers/cm3 | Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007) |



| Fibrous Glass - Inhalable fibers. | TWA | 5 mg/m3 | Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007) |
|---------------------------------------|-----|---|---|
| Fibrous Glass - Inhalable | TWA | 5 mg/m3 | Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (11 2010) |
| Fibrous Glass - Respirable fibers. | TWA | 1 fibers/mL | Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (11 2010) |
| Fibrous Glass - Fiber. | TWA | 0.2 fibers/mL | Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (11 2010) |
| Fibrous Glass - Total dust. | TWA | 10 mg/m3 | Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment) (12 2008) |
| Fibrous Glass - Fiber. | TWA | 1 fibres/cm3 (non- asbestos fibres) size restriction s apply | Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment) (12 2008) |
| | TWA | 2 fibres/cm3 (non- asbestos fibres) size restriction s apply | Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment) (12 2008) |



| Pentane | TWA | 600 ppm | Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007) |
|-----------------------------|-----|--------------------|---|
| Pentane | TWA | 600 ppm | Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (06 2015) |
| Pentane | TWA | 120 ppm 38 mg/n | Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment) (12 2008) |
| Carbon Black - Inhalable | TWA | 3 mg/n | Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (09 2011) |
| Carbon Black | TWA | 3.5 mg/n | n3 Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (11 2010) |
| Carbon Black | TWA | 3.5 mg/n | Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment) (12 2008) |

Appropriate Engineering
ControlsMechanical ventilation or local exhaust ventilation may be required.
Observe good industrial hygiene practices. Observe occupational exposure
limits and minimize the risk of inhalation of dust.

Individual protection measures, such as personal protective equipment

| General information: | Use personal protective equipment as required. |
|-------------------------------------|---|
| Eye/face protection: | Wear goggles/face shield. |
| Skin Protection Hand Protection: | Use suitable protective gloves if risk of skin contact. |
| Other: | No data available. |
| Respiratory Protection: | In case of inadequate ventilation use suitable respirator. Seek advice from local supervisor. |
| Hygiene measures: | Observe good industrial hygiene practices. Wash hands before breaks and immediately after handling the product. |

9. Physical and chemical properties

Appearance

| Physical state: | solid |
|-----------------|--------------------|
| Form: | solid |
| Color: | Black |
| Odor: | Slight |
| Odor threshold: | No data available. |



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| pH: | No data available. |
|--|--------------------|
| Melting point/freezing point: | No data available. |
| Initial boiling point and boiling range: | No data available. |
| Flash Point: | No data available. |
| Evaporation rate: | No data available. |
| Flammability (solid, gas): | No |
| Upper/lower limit on flammability or explosive | /e limits |
| Flammability limit - upper (%): | No data available. |
| Flammability limit - lower (%): | No data available. |
| Explosive limit - upper (%): | No data available. |
| Explosive limit - lower (%): | No data available. |
| Vapor pressure: | No data available. |
| Vapor density: | No data available. |
| Relative density: | 1.1 |
| Solubility(ies) | |
| Solubility in water: | Insoluble in water |
| Solubility (other): | No data available. |
| Partition coefficient (n-octanol/water): | No data available. |
| Auto-ignition temperature: | No data available. |
| Decomposition temperature: | No data available. |
| Viscosity: | No data available. |
| | |

10. Stability and reactivity

| Reactivity: | No data available. |
|--------------------------------------|---|
| Chemical Stability: | Material is stable under normal conditions. |
| Possibility of hazardous reactions: | No data available. |
| Conditions to avoid: | Avoid heat or contamination. |
| Incompatible Materials: | No data available. |
| Hazardous Decomposition Products: | Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapors. |

11. Toxicological information

| Information on likely routes of exposure | |
|--|---|
| Ingestion: | May be harmful if swallowed. |
| Inhalation: | In high concentrations, vapors, fumes or mists may irritate nose, throat and mucus membranes. |
| Skin Contact: | Moderately irritating to skin with prolonged exposure. |
| Eye contact: | Eye contact is possible and should be avoided. |



Information on toxicological effects

| Oral Product: | ATEmix: 4,000 mg/kg |
|--|--|
| Dermal Product: | No data available. |
| Inhalation Product: | No data available. |
| Specified substance(s): Pentane | LC 50 (Rat, 4 h): 364 mg/l |
| Repeated dose toxicity Product: | No data available. |
| Skin Corrosion/Irritation Product: | No data available. |
| Specified substance(s): Fibrous Glass | in vivo (Rabbit): Experimental result, Key study |
| Pentane | in vivo (Rabbit): Experimental result, Key study |
| Carbon Black | in vivo (Rabbit): Experimental result, Key study |
| Serious Eye Damage/Eye Irritation Product: No data available. | |
| Specified substance(s): Pentane | Irritating in vivo (Rabbit, 48 hrs): Not irritating in vivo (Rabbit, 24 hrs): Not irritating in vivo (Rabbit, 1 hrs): Not irritating in vivo (Rabbit, 1 hrs): Not irritating |
| | |

Carbon Black in vivo (Rabbit, 24 - 72 hrs): Not irritating

Respiratory or Skin Sensitization

No data available.

Carcinogenicity Product:

Product:

May cause cancer.



IARC Monographs on the Evaluation of Carcinogenic Risks to Humans:

| | us Glass on Black | Overall evaluation: Not classifiable as to carcinogenicity to humans. Overall evaluation: Not classifiable as to carcinogenicity to humans. Overall evaluation: Possibly carcinogenic to humans. Overall evaluation: Possibly carcinogenic to humans. Overall evaluation: Possibly carcinogenic to humans. |
|--|------------------------------------|--|
| | cology Progra i us Glass | n (NTP) Report on Carcinogens: Reasonably Anticipated to be a Human Carcinogen. Reasonably Anticipated to be a Human Carcinogen. |
| US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050): No carcinogenic components identified | | |
| Germ Cell Mutage | enicity | |
| In vitro Product: | | No data available. |
| In vivo Product: | | No data available. |
| Reproductive tox Product: | icity | No data available. |
| Specific Target Organ Toxicity - Single Exposure Product: No data available. | | |
| Specific Target O Product: | rgan Toxicity - | Repeated Exposure No data available. |
| Aspiration Hazard Product: | i | No data available. |
| Other effects: | | No data available. |

12. Ecological information

Ecotoxicity:

Acute hazards to the aquatic environment:

Fish Product:

No data available.



| Aquatic Invertebrates Product: | No data available. |
|--|---|
| Chronic hazards to the aquation | c environment: |
| Fish Product: | No data available. |
| Specified substance(s): Pentane | NOAEL (Oncorhynchus mykiss, 28 d): 6.165 mg/l QSAR QSAR, Key study |
| Carbon Black | NOAEL (Salmo sp., 30 d): 17 mg/l QSAR QSAR, Key study |
| Aquatic Invertebrates Product: | No data available. |
| Toxicity to Aquatic Plants Product: | No data available. |
| Persistence and Degradability | |
| Biodegradation Product: | No data available. |
| BOD/COD Ratio Product: | No data available. |
| Bioaccumulative Potential Bioconcentration Factor (BC Product: | CF) No data available. |
| Partition Coefficient n-octanol / water (log Kow) Product: No data available. | |
| Specified substance(s): Pentane | Log Kow: 3.39 |
| Mobility in Soil: | No data available. |
| Other Adverse Effects: | No data available. |
| 13. Disposal considerations | |
| Disposal instructions: | Dispose of waste at an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal. |
| Contaminated Packaging: | No data available. |



14. Transport information

TDG:

Not Regulated

CFR / DOT:

Not Regulated

IMDG:

Not Regulated

15. Regulatory information

US Federal Regulations

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D) None present or none present in regulated quantities.

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050) None present or none present in regulated quantities.

CERCLA Hazardous Substance List (40 CFR 302.4):

| Chemical Identity | Reportable quantity |
|-------------------|----------------------------|
| Pentane | 100 lbs. |

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories Delayed (Chronic) Health Hazard

SARA 302 Extremely Hazardous Substance

None present or none present in regulated quantities.

| SARA 304 Emergency Release Notification | |
|---|---------------------|
| Chemical Identity | Reportable quantity |
| Pentane | 100 lbs. |

SARA 311/312 Hazardous Chemical

| Chemical Identity | Threshold Planning Quantity |
|-------------------|-----------------------------|
| Fibrous Glass | 500 lbs |
| Pentane | 500 lbs |
| Carbon Black | 500 lbs |

SARA 313 (TRI Reporting)

None present or none present in regulated quantities.

Clean Water Act Section 311 Hazardous Substances (40 CFR 117.3)

None present or none present in regulated quantities.



One or more components in this product are not listed on or exempt from the Inventory.

All components in this product are listed on or

One or more components in this product are

One or more components in this product are not listed on or exempt from the Inventory.

One or more components in this product are not listed on or exempt from the Inventory.

not listed on or exempt from the Inventory.

exempt from the Inventory.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130):

Chemical Identity Pentane Reportable quantity

US State Regulations

US. California Proposition 65

This product contains chemical(s) known to the State of California to cause cancer and/or to cause birth defects or other reproductive harm.

US. New Jersey Worker and Community Right-to-Know Act

Chemical Identity Fibrous Glass Pentane Carbon Black

US. Massachusetts RTK - Substance List

<u>Chemical Identity</u> Fibrous Glass Pentane

US. Pennsylvania RTK - Hazardous Substances

<u>Chemical Identity</u> Fibrous Glass Pentane

US. Rhode Island RTK

Chemical Identity Pentane

Other Regulations:

| Regulatory VOC (less water | 0 g/l |
|----------------------------|--------|
| and exempt solvent): | |
| VOC Method 310: | 0.00 % |

Inventory Status:

Australia AICS:

Canada DSL Inventory List:

EINECS, ELINCS or NLP:

Japan (ENCS) List:

China Inv. Existing Chemical Substances:



| Korea Existing Chemicals Inv. (KECI): | One or more components in this product are not listed on or exempt from the Inventory. |
|---------------------------------------|--|
| Canada NDSL Inventory: | One or more components in this product are not listed on or exempt from the Inventory. |
| Philippines PICCS: | One or more components in this product are not listed on or exempt from the Inventory. |
| US TSCA Inventory: | All components in this product are listed on or exempt from the Inventory. |
| New Zealand Inventory of Chemicals: | One or more components in this product are not listed on or exempt from the Inventory. |
| Japan ISHL Listing: | One or more components in this product are not listed on or exempt from the Inventory. |
| Japan Pharmacopoeia Listing: | One or more components in this product are not listed on or exempt from the Inventory. |
| Mexico INSQ: | One or more components in this product are not listed on or exempt from the Inventory. |
| Ontario Inventory: | One or more components in this product are not listed on or exempt from the Inventory. |
| Taiwan Chemical Substance Inventory: | One or more components in this product are not listed on or exempt from the Inventory. |

16.Other information, including date of preparation or last revision

| Revision Date: | 09/26/2016 |
|----------------------|---|
| Version #: | 1.1 |
| Further Information: | No data available. |
| Disclaimer: | For Industrial Use Only. Keep out of Reach of Children. The hazard information herein is offered solely for the consideration of the user, subject to their own investigation of compliance with applicable regulations, including the safe use of the product under every foreseeable condition. |